

PROPRIETARY AND CONFIDENTIAL

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6 4-WIRE CABLE

WIRE	36 AWG, 7/44 SILVER PLATED COPPER
WIRE INSULATION	PFA, .006 NOMINAL WALL
SHIELD	44 AWG SILVER PLATED SOFT COPPER BRAID
JACKET	PFA, WHITE, .006 INCH NOMINAL WALL
DIAMETER	Ø .045 NOMINAL
TEMP	-196 TO +200 DEG C
VOLTAGE	150 VOLTS AC

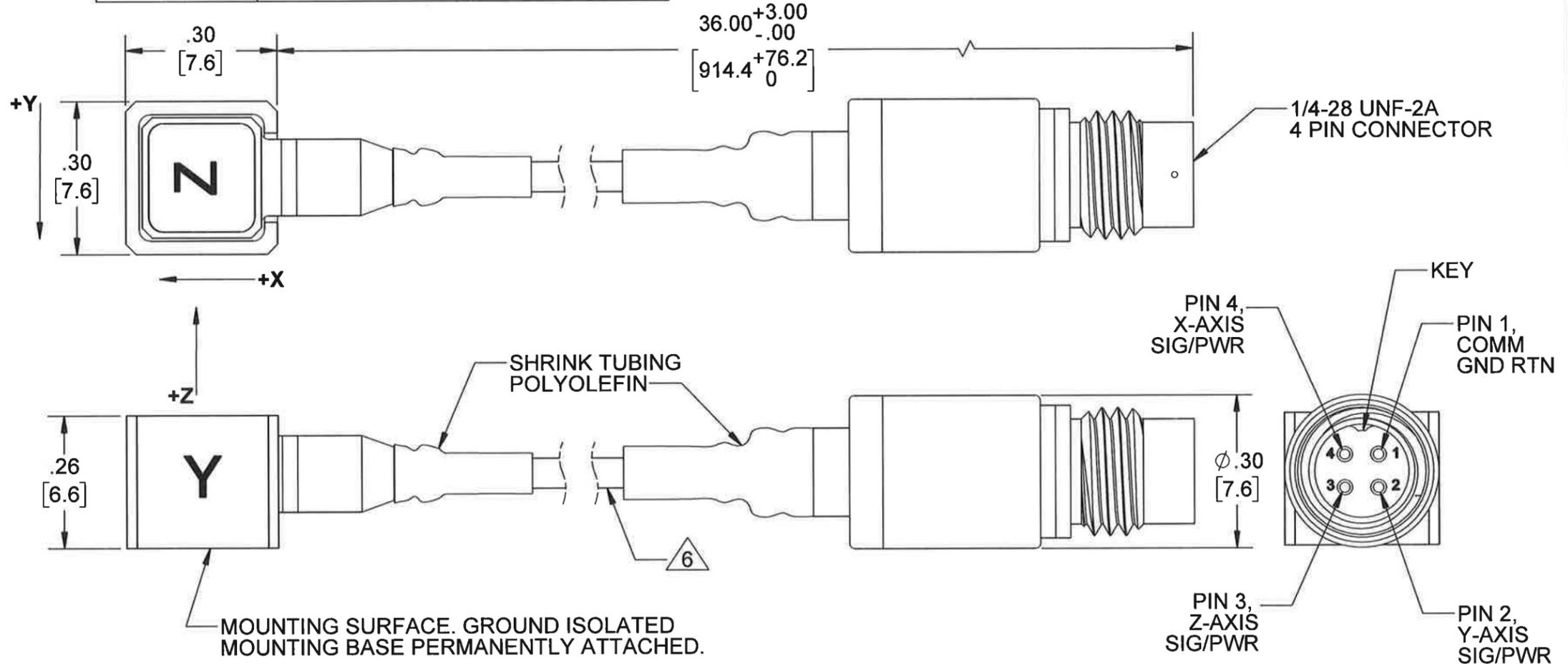
REVISIONS

REV.	ECN	DESCRIPTION	BY/DATE	CHK	APPR
A	13348	INITIAL RELEASE	NDC 03/16/17	LN	AS
B	13437	ADDED "LOW OUTGASSING" NOTE	JB 5/9/2017	MH	LN

MODEL	SENSITIVITY
3133D15T	0.25 mV/g
3133D16T	0.7 mV/g
3133D17T	2mV/g
3133D18T	5mV/g
3133D19T	10mV/g



REMOVAL TOOL, MODEL 6981, INCLUDED



7. LOW OUTGASSING.

6 SEE TABLE FOR 4 WIRE CABLE SPECIFICATIONS.

5. DYTRAN MODEL 6298 PETRO MOUNTING WAX AND MODEL 6981 REMOVAL TOOL, SUPPLIED.

4. ARROWS INDICATE DIRECTION OF ACCELERATION FOR POSITIVE OUTPUT.

3 FOR BEST FREQUENCY RESPONSE, PREPARE A FLAT MOUNTING SURFACE OF AT LEAST Ø .39, FLAT TO .0001 TIR. APPLY ONE DROP OF CYANOACRYLATE ADHESIVE TO MOUNT THE ACCELEROMETER.

2. HOUSING MATERIAL: TITANIUM ALLOY. ISOLATION BASE: ANODIZED ALUMINUM.

1. WEIGHT: 1.3 GRAMS MAX, LESS CABLE.

NOTES: UNLESS OTHERWISE SPECIFIED

UNLESS OTHERWISE SPECIFIED: INTERPRET DIM & TOL PER ASME Y14.5M - 1994. REMOVE BURRS. COUNTERSINK INTERNAL THDS 90° TO MAJOR DIA. CHAM EXT THDS 45° TO MINOR DIA. THD LENGTHS AND DEPTHS ARE FOR MIN FULL THDS. DIMENSIONS APPLY AFTER FINISHING.

ALL MACHINED SURFACES: 63/ TOTAL RUNOUT WITHIN .005. BREAK SHARP EDGES .005 TO .010. MACHINED FILLET RADII .005 TO .015. WELDING SYMBOLS PER AWS A2.4. ABBREVIATIONS PER MIL-STD-12.

UNLESS OTHERWISE SPECIFIED: DIMENSIONS ARE IN INCHES. DIMENSIONS IN BRACKETS [] ARE IN MILLIMETERS TOLERANCES ARE:

DECIMALS	METRIC	ANGLES
.XX ± .03	.X ± 0.8	± 1°
.XXX ± .010	.XX ± 0.25	

APPROVALS: ORIG NDC 03/13/17, CHK LN 03/31/17, APP AS 04/04/17

DATE: 03/13/17, 03/31/17, 04/04/17

DO NOT SCALE DRAWING

THIRD ANGLE PROJECTION USA

DYTRAN MASTER INSTRUMENTS, INC. Chatsworth, CA ONLY IN RED

TITLE: OUTLINE/INSTALLATION DRAWING, 3133D15T

SIZE B, CAGE CODE 2W033, DWG NO 127-3133D15T, REV B

SCALE: 1:1, SHEET 1 OF 1

Model Number 3133D18T	PERFORMANCE SPECIFICATION	DOC NO PS3133D18T
	Accelerometer, Triaxial, IEPE	REV D, ECN 17013, 03/22/23



- **ULTRA MINIATURE SIZE**
- **IDEAL LOW FREQUENCY RESPONSE**
- **LOW BASE STRAIN SENSITIVITY**
- **TEDS FEATURE**
- **GROUND ISOLATED**
- **LOW OUTGASSING**

This family also includes:

Model	Sensitivity (mV/g)	Range (g pk)	Resolution (g RMS)	Oper. Temp (°F)	TC
3133D15T	0.25	20,000	0.5	-67 to 320	0.5 to 4.0
3133D16T	0.7	5,000	0.3	-67 to 320	0.5 to 2.5
3133D17T	2	2,500	0.15	-67 to 320	0.3 to 2.5
3133D19T	10	500	0.02	-67 to 320	1.1 to 2.5

Refer to the performance specifications of the products in this family for detailed description

Supplied Accessories:

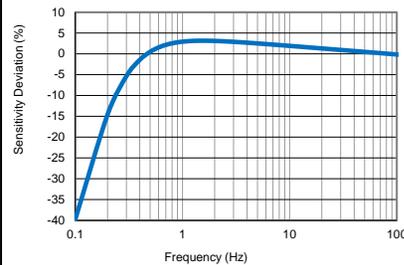
- 1) Model 6298 small petro wax
- 2) Model 6981 removal tool
- 3) Accredited calibration certificate (ISO 17025)

Notes:

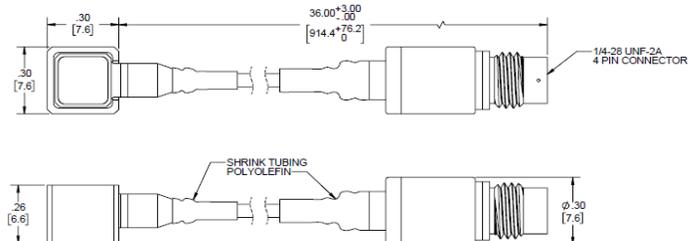
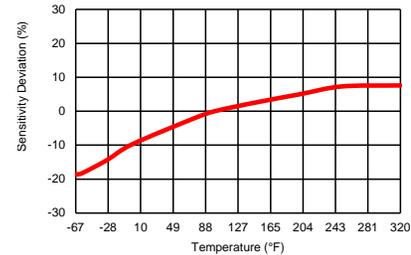
- [1] Measured at 100 Hz, 10 g RMS.
 - [2] Actual sensitivity is given on a calibration certificate.
 - [3] Do not apply power to this device without current limiting, 20mA max, to do so will destroy the integral IC amplifier.
 - [4] Measured using zero-based straight line method, % of F.S. or any lesser range.
 - [5] All specifications are at room temperature unless otherwise specified.
 - [6] In the interest of constant product improvement, we reserve the right to change specifications without notice.
- It is the customer's responsibility to validate that a particular product with the properties described in the product specification is suitable for use in a particular application. Parameters provided in datasheets and / or specifications may vary in different applications and performance may vary over time. All operating parameters, including typical parameters, must be validated for each customer application by the customer's technical experts.

	ENGLISH		SI	
PHYSICAL				
Weight	0.03	oz	0.8	grams
Mounting	Adhesive		Adhesive	
Integral Cable	Length	3	ft	914
Connector	Type	4-pin		4-pin
Housing	Material	Titanium		Titanium
Isolation Cup	Material	Anodized Al		Anodized Al
Sensing Element	Material	Ceramic		Ceramic
	Mode	Shear		Shear
PERFORMANCE				
Sensitivity [1], [2], ± 25%	5	mV/g	0.5	mV/m/s ²
Acceleration Range	1,000	g pk	9810	m/s ² pk
Frequency Range, ±5%	0.3 to 6000	Hz	0.3 to 6000	Hz
Frequency Range, ±10%	0.25 to 10000	Hz	0.25 to 10000	Hz
Linearity [4]	± 1	% F.S.	± 1	% F.S.
Resonance Frequency	>27	kHz	>27	kHz
Transverse Sensitivity	6	%	6	%
Output Impedance	100	Ω	100	Ω
Noise floor, Max.	0.06	g RMS	0.59	m/s ² RMS
ENVIRONMENTAL				
Maximum Shock	3,000	g pk	29430	m/s ² pk
Operating Temperature	-67 to +320	°F	-55 to 160	°C
TEDS Operating Temperature	-40 to +185	°F	-40 to +85	°C
Seal	Hermetic		Hermetic	
Magnetic Sensitivity at 100 Gauss	0.0002	g/Gauss	0.002	m/s ² /Gauss
Base Strain Sensitivity	0.001	g/με	0.01	m/s ² /με
ELECTRICAL				
Compliance Voltage	+19 to +30	VDC	+19 to +30	VDC
Current Range [3]	2 to 20	mA	2 to 20	mA
Case Isolation, Min.	10	GΩ	10	GΩ
Bias Voltage	+7 to +14	VDC	+7 to +14	VDC
Discharge Time Constant	1.1 to 2.5	Sec	1.1 to 2.5	Sec
Output Impedance	100	Ω	100	Ω
TEDS Feature	IEEE 1451.4		IEEE 1451.4	

TYPICAL LOW FREQUENCY RESPONSE



TYPICAL TEMPERATURE RESPONSE



Units on the line drawing are in inches, units in brackets are in millimeters. Refer to 127-3133D15T for more information.

